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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/537,250	03/28/2000	Anthony John Olivier	U 012693-7	5335
140	7590	10/31/2003	EXAMINER	
LADAS & PARRY 26 WEST 61ST STREET NEW YORK, NY 10023			NGUYEN, TAM M	
			ART UNIT	PAPER NUMBER
			1764	

DATE MAILED: 10/31/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/537,250

Applicant(s)

OLIVIER ET AL.

Examiner

Tam M. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 July 2003.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All   b) ☐ Some \*   c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)                      4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_                      6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-5 and 7-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ireland et al. (4,041,097).

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Ireland discloses a process for separating a Fischer-Tropsch derived paraffinic hydrocarbon feedstock, which comprises light, medium, and heavy paraffins, by feeding the feedstock into a distillation column to produce an overhead stream, a side stream, and a bottom stream. It is noted that Ireland does not specifically disclose that the side stream and the bottom stream are usable wax products. However, the Ireland process is similar to the claimed process. Therefore, the Ireland wax product would have similar characteristics as the claimed wax products. It is also noted that Ireland does not specifically disclose that the distillation column produces usable wax products, hard wax, and paraffins. However, each fraction from the distillation column of Ireland contains paraffins and each has different boiling points. Therefore, the limitations are embraced by the reference. (See col. 2, line 52 through col. 3, line 23; col. 7, lines 39-61; claims 1 and 2)

Ireland does not disclose that the distillation column is operated at conditions (claimed pressures and temperatures) so that there is no thermal degradation of the feedstock or of the wax products. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the process of Ireland by operating the distillation column at conditions that result in no thermal degradation of the feedstock or of the wax products because the operating conditions of the distillation column of Ireland are not a critical component. Therefore, one of skill in the art would operate the Ireland column at any conditions including the claimed conditions to produce different fractions that have different boiling points and it would be expected that the results would be the same or similar when using the claimed condition in the process of Ireland.

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Ireland does not disclose the dimensions and the characteristics of the column. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the Ireland process by utilizing a distillation column having the claimed dimensions and the claimed physical characteristics because the dimensions and the characteristics of the column are not a critical component. Therefore, one of skill in the art would employ any column including the claimed column to separate a feedstock into at least one overhead stream, one side stream, and one bottom stream and it would be expected that the results would be the same or similar when using the claimed column in the process of Ireland.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over the reference as applied to claims 1-5 above, and further in view of Farnham (4,295,936).

Ireland does not specifically disclose that the bottom fraction is cooled and recycled back to the column. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the Ireland process by recycling about 10% of the bottom fraction back to the column because Farnham discloses that pumping costs are saved and the overall degradation rate is lower when recycling less than one-fifth the amount of cooled bottoms to the column. (See col. 4, lines 15-23)

### ***Response to Arguments***

The argument that there is no teaching in Ireland that the bottom product comprises usable wax product, by routing it to a hydrogenation stage 62 where it is subjected to catalytic hydrodewaxing is not persuasive because there is no evidence to support that if the bottom product does not pass to a hydrogenation stage 62, the bottom product would not comprise

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usable wax. Since the modified process of Ireland is similar to the claimed process, it would be expected that a bottom product stream of Ireland would comprise usable wax as claimed.

The argument that side stream 20 is subjected to catalytic hydrodewaxing in zone 68 to obtain dewaxing oil and, therefore, it is concluded that stream 20 does not comprise usable wax products is not persuasive because Ireland discloses that stream 20 comprises wax and the modified process of Ireland is similar to the claimed process in terms of feedstock, distillation column, and operating conditions. It would be expected stream 20 would comprise at least small amount of usable wax as claimed.

The argument that the emphasis in Ireland is to maximize yield of high octane gasoline boiling components and light oil materials suitable for use as diesel fuel and there is no suggestion in Ireland to operate the distillation column so that there is no thermal degradation of the feedstock and, as a result, one of skill in the art would find no guidance in Ireland on how to operated the distillation column to obtained usable wax products is not persuasive. There is no evidence to show that if gasoline and diesel fuel are produced from the column, streams 20 and 22 would not comprise usable wax. Besides, one of skill in the art would operate the column at any conditions (including the claimed conditions) that results in the production of gasoline, diesel fuel, and waxy streams (e.g., streams 20 and 22). Applicant has not shown why the Ireland process would be inoperable when the column is operated at the claimed conditions.

*Conclusion*

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tam M. Nguyen whose telephone number is (703) 305-7715. The examiner can normally be reached on Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on 703-308-6824. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Tam M. Nguyen  
Examiner  
Art Unit 1764

TN

  
Walter D. Griffin  
Primary Examiner